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ABSTRACT

This paper outlines a theory of communicative competence and argues for a view of communicative competence as a postulated set of abstract cognitive operations that serve to generate mental representations of the social world. In addition to this function, the discussion serves as a review of literature bearing on the subject of communicative competence. Chapters are "The Competence Paradigm," "Current Literature on Communicative Competence," "Ethnographic-Sociolinguistic Evidence," "Formal-Semantic Evidence," "Cognitive-Developmental Evidence," and "Toward a Theory of Communicative Competence." A bibliography of references completes the work. (KS)

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PROLOGUE TO A THEORY OF COMMUNICATIVE COMPETENCE

SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA

by

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INTRODUCTION

This paper describes the rationale and nature of a theory of communicative competence. Bertrand Russell, always a proponent of a strictly referential theory of meaning, would no doubt be greatly troubled by the phrase "a theory of communicative competence." According to Russell (1919), the phrases "a stone that turns lead to gold" or "a unicorn" are meaningless; they have no reference. Similarly, a theory of communicative competence is, in a sense, a theoretical unicorn; such a theory does not exist.

Nevertheless, and despite the honored spectre of Mr. Russell, this monograph persists in keeping to its chosen subject. While it is true that there are currently no theories of communicative competence satisfying the definitional constraints that will be presented further on, a lively literature about the construct has arisen in recent years. The notion of communicative competence has surfaced rather casually in such seemingly diverse contexts as a summary of research in written composition (Giannasi, 1976) and a book review in the Quarterly Journal of Speech (Williams, 1976). The Speech Communication Association has sponsored a related study of children's communication competencies (Allen & Brown, 1976) and the term "communicative competence" has appeared in a slew of recent articles and dissertations, or at least in their titles. Moreover, the notion of communicative competence is intimately bound up with the concept of a rule-governed perspective on communication, which has received prominent attention lately (Cushman, 1975; Sanders, 1973).

Surely some common conceptual thread unites most of this body of literature. Yet the concept of communicative competence is rarely explicated in a very specific manner and thus remains elusive. The goal of this paper is to describe the outline that such a theory would take if formalized. The paper will argue for a view of communicative competence as a postulated set of abstract cognitive operations which serve to generate mental representations of the social world. These representations, in turn, are postulated as underlying the ability to use symbols in a contextually appropriate fashion.

What this paper will not do is to construct an actual theory of communicative competence. It will not develop a notational system nor construct formal theorems and propositions as would a truly theoretical exposition. Rather, the aim of this paper is restricted to the more feasible, albeit abstract, goal of discussing the assumptions upon which a theory of communicative competence might be built. In this sense, the explication which follows is metatheoretical; it seeks to develop a model of a theory. No doubt the appearance of a well developed grammar of some specific communicative act would aid greatly our understanding of communicative competence. But such a theory would be premature without the prerequisite conceptual framework justifying and explaining its rationale. This essay is an attempt to provide just that framework.

In addition to the goal of clarifying metatheoretical assumptions, this monograph will serve as a compendium of literature bearing on the concept of communicative competence. Currently, there is no single source which performs this function. The essay catalogues major works

dealing explicitly with communicative competence as well as discusses a number of approaches which are consistent with the communicative competence perspective. Thus, this paper's breadth is partially a result of its function as a review.

In order to achieve these goals, material is drawn from a number of related areas. The first section concerns the basic definitional issues entailed in characterizing competence theories generally. The basic epistemological and methodological assumptions that may be said to constitute the competence paradigm will be identified. Attention is given to the issue of explanation in competence theories.

Beginning with Chapter Two, the emphasis moves from competence explanations of cognition generally to explanations more particular to the social cognitions underlying communication. This chapter reviews current literature claiming allegiance to a communicative competence perspective. Employing the metatheoretical assumptions of the competence paradigm, works on communicative competence are examined for the rigor with which they adhere to the more general framework. The conclusion warranted by this literature review is that the general trend in conceptualizing communicative competence violates the essential mentalistic principles of the competence perspective.

In an attempt to demonstrate the feasibility of a mentalistic approach to communicative competence, Chapters Three, Four, and Five cite evidence amenable to a rigorous competence analysis from several disciplines related to communication studies. Chapter Three discusses observations organized under the rubrics of sociolinguistics and the ethnography of speaking. Chapter Four is concerned with the interaction

of pragmatic presuppositions with formal syntactic theory as well as with that branch of semantics known as speech act theory. The subject of Chapter Four is cognitive developmental psychology as explicated by the Piagetian school.

The final section of this monograph attempts to consolidate the more fractured discussions that have preceded it. It will present a more coherent picture of the components of a theory of communicative competence and characterize the types of terms and operations that such a theory would require. However, the paper stops short of actually specifying some testable theory. The reader ought not expect, nor fear, more than a set of metatheoretical statements about communicative competence. If this work carries communication theory but one step closer toward a theory of communicative competence, then it will have served its intended purpose.

CHAPTER I

THE COMPETENCE PARADIGM

The notion of competence is prone to varying usages leading to some confusion about what a competence theory is, or ought to be (Campbell & Wales, 1970). Ordinary language usage of "competent" yields at least two senses. To say

(1) Namath is one competent quarterback and is worth every cent he's getting

is to attest that Namath has mastery of the art of quarterbacking and regularly displays this proficiency in the appropriate setting. But to state

(2) Namath is competent to be a quarterback, it's just that he chases women too much

is to distinguish competence from actual performance and to associate it, instead, with potential performance or capability. In addition, the second usage does not necessarily carry the suggestion of unusual skill as does the first, but rather connotes just that degree of ability necessary to satisfy minimal criteria for quarterbacking. Similarly, to be declared competent to stand trial is to be certified as at least minimally capable of exercising judgment, whether or not judgment has, in fact, been exercised.

In accord with the first sense, a theory of competence is a theory of excellence and is at least latently prescriptive since it must include evaluation procedures for ranking one performance better than another. In the second sense, a theory of competence is a theory of potential performance, how a person might be capable of performing some set of behaviors if only debilitating and logically extraneous factors could be removed. While behavioral scientists frequently implicitly or explicitly associate competence theories with "mastery" (Connolly & Bruner, 1974) or with idealized performance (Winterowd, 1975), competence theories have been most clearly developed in a more restricted sense, only partially linked with these ordinary language conceptions.

The paradigmatic (perhaps the sole) model of a competence theory in the social sciences is that of generative-transformation linguistics (Chomsky, 1965). According to this theory, linguistic competence is the tacit knowledge which an ideal speaker/hearer must possess in order to account for intuitive judgments of sentences' grammaticality, synonymy, etc. as well as to account for the production and comprehension of novel sentences.

The notion of linguistic competence was a revolutionary innovation since it contradicted well established positivist and behaviorist assumptions such as empiricism and probabilistic-causal explanation. As an ideal-type theory (Weber, 1969), linguistic competence has no exact correlate in the world of real human behavior or cognition. It is certainly not amenable to direct observation. In further contradiction to mainstream tenets, postulation of linguistic competence weakens the dependency of verbal behavior on antecedent

events (Chomsky, 1959), a dependency which is critical for classical modes of causal-psychological explanation, that is, conditioning theory (Sanders & Martin, 1975; Toulmin, 1974). Rather, linguistic competence admits the existence of a finite set of general rules which accounts for an infinite set of unprecedented behaviors, not under direct or indirect stimulus control.

Although competence theory was first established and articulated in the realm of linguistics, the paradigm is, in principle, suitable for theory construction in all areas dealing with complex cognitive systems (Chomsky, 1972; Fodor, Jenkins & Saporta, 1967; Miller & Chomsky, 1963). Recently, Pylyshyn (1970, 1972, 1973) and Sanders and Martin (1975), as well as others, have begun to elucidate the general characteristics or metatheory entailed in the competence paradigm.[1]

Competence theories deal with the epistemic problems of human information processing as distinguished from questions of how cognitive activities are executed. That is, competence theories are theories of the structures by which the world is mentally represented. According to Pylyshyn, a competence theory is

> . . . committed to the belief that underlying observed behavior is a more perfect mathematical structure. Indeed, its concern is not with behavior per se, but rather with how information about the world is represented in a person's mind which makes it possible for him to perform the way he does or the way he could perform under a variety of circumstances. (1972, p. 548)

The goal of competence theories, then, is not primarily the prediction and control of behavior. These functions can be better performed by essentially "atheoretic" models associating stimuli with responses (Luce, 1970). The "classical" prediction and control paradigm explains

the occurrence of events by observing the probability with which a subsequent event follows a particular antecedent. The competence paradigm, on the other hand, does not seek to explain events at all. Rather, its goal is to "explain" the existence of cognitive entities (Harre, 1974; Sanders & Martin, 1975).

In order to achieve this end, competence theories depend heavily on intuitions of capable performers as data. Intuitions are relied upon because they permit the investigator to go beyond the surface structure of manifest phenomena and inquire about the deep structures of cognitive systems. Informants may be questions about their senses of relatedness of constituents, about well-formedness or deviance in behavioral sequences, or about appropriateness of behaviors in contexts. Obviously the important methodological questions facing competence researchers are those concerning how intuitions might best be elicited, how competence can be inferred from what is unavoidably performance data. Currently, considerable controversy surrounds these questions (Labov, 1971, p. 191-200). Despite methodological dilemnas, it should be noted that intuitions, in principle, have the status of completely objective and proper data (Kripke, 1972).

From intuitive judgments, rules are inferred. A rule is a means of representing procedures by which whole concepts are constructed of their parts. The constructive aspect of competence has important ramifications for claims about the nature of information processing. Were each sensory stimulus type associated in a one-to-one correspondence with a mental construct, rules would not be an appropriate way to represent cognition. However, the associationistic premise is untenable

in light of certain facts about the mind. First, the human mind has finite capacities, yet is capable of processing an infinite number of stimulus types. This creativity, already noted with respect to language, pertains to all non-rote concepts. For stimulus types X and Y, there is a novel stimulus type Z such that Z is constituted of some concatenation of X and Y. By recursively varying the values of the terms, it can be seen that, in principle, an infinite number of novel stimuli, all systemically related, exist. At the same time, if a person can comprehend X and Y, it surely follows that any Z is comprehensible simply by knowing a concatenation operation. A person need not represent every Z separately. To do so would soon deplete human processing mechanisms except for the shortest of lists (Miller & Chomsky, 1963). On the other hand, it is quite within the parameters of mental resources to learn a relatively small number of operations and a short list of terms which may be combined in an infinite variety of sequences.

Typically, such postulated cognitive rules are expressed formally. That is, notation in competence theories conforms to that of some mathematical system like algebra or symbolic logic (Luce, 1970). However, notation may also take the form of taxonomies, feature analyses, grammars or certain heuristics (Grimshaw, 1974). The function of formalization is to reveal structural relations and to aid in the detection of deductive error (Nagel & Newman, 1964). In addition, abstract terms facilitate the expression of generalizations. Metatheoretical statements allow the interpretation of formalisms into terms more approximate to the real world phenomena being studied. It

is as formal systems that competence theories qualify as mathematical models (Brodbeck, 1969).

Formal rules are generalizations about the operations by which concepts are constructed. Recursive rules are of the type

$$a \longrightarrow ba$$

and generate expressions like

ba
bba
bbba

through repeated applications. Such rules are necessary in order to account for the creative aspect of information processing. A subclass of recursive rules are of the form

$$a \longrightarrow bac$$

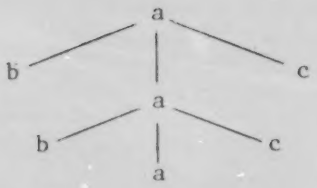
and generate expressions like

bac
bbacc
bbbaccc

as the rule is re-applied. These rules account for discontinuous and nested dependencies. In the second string produced by the nesting rule above, for example, the initial and final terms are related to each other more closely than they are to their contiguous terms. Similarly, the three middle terms constitute a hierarchical unit in which the initial and final terms do not participate. These structural relations, which are not apparent by simply observing the manifest sequence, can equivalently be represented by labelled bracketing

$$[_0 b [_1 bac] c]$$

or by a tree diagram:



Generalizations about discontinuous and nested dependencies like those represented above cannot be captured by probabilistic left-to-right models in which subsequent terms are generated on the basis of previous terms (Miller & Chomsky, 1963). Structures containing discontinuous dependencies abound in natural language. For example:

(3) The quarterback who I previously pronounced competent is not.

However, such nested patterns are also prevalent in all complex behavior. Let us, for example, hypothesize an ideal giver of formal balls. The ball-giver offers the intuition that balls are comprised of two major constituents: dancing and consuming. Upon further reflection, the informant reveals that dancing is composed of dyadic rhythmic motion (drm) obligatorily and consuming and chatting optionally. Consuming consists of eating and drinking obligatorily and chatting optionally. In formal notation,

(1) ball $\rightarrow$ dancing + consuming

(2) dancing $\rightarrow$ drm + (consuming) + (chatting) + (dancing)

(3) consuming $\rightarrow$ eating + drinking + (chatting) + (consuming)

The informer might recognize further regularities, such as selectional restrictions on certain kinds of eating when dancing is the dominant mode. Nevertheless, these rules represent the general structural pattern of the concept of "ball". Rules (2) and (3) incorporate

recursivity allowing in principle balls unbounded in length. Consuming may be nested in the midst of dancing behavior. While eating hors d'oeurves might bear surface resemblance to eating steak, our ball-giver's rules permit the recognition of one as part of a dancing sequence and the other as part of the main course. Given this set of rules we can recognize different styles of balls ("More eatin' than dancin'", etc.); but of an infinite number of different sequences, we could unambiguously select conforming balls from non-balls.

Though we would be hard pressed to justify sustained interest in the substance of this example, it does serve to illustrate that all cognized phenomena can be formally represented by a list of components and their allowable relations. The example presents only one possible representation. In general, an unlimited number of formal systems may adequately describe a competence (Chomsky, 1965). The procedures for evaluating the more optimal system among competitors utilize aesthetic criteria like parsimony, simplicity, and elegance as defined internally on formal features. Thus, within the context of competence theories, an essential criterion for adequacy is not isomorphism with real psychological processes.

The related issue of psychological reality is a complex and frequently misunderstood one. Competence theories are descriptions of idealized knowledge which is postulated as underlying the ability to execute cognitive routines. A competence theory cannot claim to map actual information processing strategies. Such a mapping is in the realm of performance or process theories. In fact, as ideal-type constructs, competence theories purposefully ignore the effects of many

psychological process variables in order to lay bare underlying structural relations. This approach, while limiting direct practical application, is not an unprecedented method for model building in the social sciences (Brodbeck, 1969; Weber, 1969).

In any event, there is no a priori reason to suspect the existence of exact correspondence between any given rule system and psychological process. Indeed, empirical confirmation of a strong correspondence hypothesis is quite unlikely (VanderGeest, et al., 1973). Nor is there any reason to assume, as many psycholinguistic models seem to (Slobin, 1971; Chomsky, 1965), that a competence theory may function as an intact component of a performance mechanism, with other psychological factors simply imposing error and processing constraints on the output of the rules.

Nevertheless, the formulation of competence is essential and prerequisite to the construction of an adequate performance theory. Pylyshyn states that

> . . . the development of a more general theory of cognition should proceed by attempting to account for the structure which is the output of a competence theory, together with other kinds of psychological evidence . . . . Thus, the major contribution of the competence theory is the isolation of an important class of non-behavioral evidence to be considered by a broader theory of cognition. (1973, p. 46)

That is, a competence theory provides necessary (but not sufficient) conditions for the construction of a theory of psychological process. The competence formulation provides the basic structural constraints to which the performance theory must conform. In addition, rules specify systemic variables and therefore provide heuristic direction for process research.

This characterization of competence theories adheres to a rather rigorous position. Frequently investigators working in the competence paradigm utilize concepts which seem to contradict basic premises of their framework. Two such concepts are found in literature related to communicative competence and deserve clarification here.

Sociolinguists (Bickerton, 1972; Labov, 1969) and language development researchers (Chomsky, 1969; Menyuk, 1969) often make reference to individuals' or groups' competences. Such references are problematical because they imbue competence, which is a postulated formal system, with a locus in human beings. This, in turn, implies an ontological status similar to psychological reality. Strictly speaking, individuals do not <u>have</u> competence. However, the heterogeneity of behavior necessitates some means of expressing the fact that people do cognitively structure events differently. Mentions of individuals' and groups' competences are best viewed as reflecting variation in systemic distribution, not as implicit ontological claims. Recent controversies in linguistics concerning appeal to dialect and idiolect as justification for judgments about unclear cases (Coleman, 1973; Labov, 1972) are related to the problem of individuals' competences. Where members of a language community disagree on judgments of grammaticality, the task of writing a grammar of a language is complicated. Proposals for dealing with the problem indicate that heterogeneity is not debilitating for the competence paradigm (Bickerton, 1973; Fraser, 1972).

A second concept that requires explication is that of rule-governed behavior (Ervin-Tripp, 1972; Hawes, 1973; Searle, 1969; Slobin, 1971). Competence theories are not about behavior at all, but rather pertain to the cognitive structure underlying behavior. Rules are mathematical models of mental representations. Within the competence paradigm one would not wish to claim that rules govern behavior in any direct way. Rather, the notion of rule-governed behavior relates to the fact that people behave as if they were conforming to rules (Hayek, 1967). That is, behavior reveals pattern and systematic dependency between variables. In addition, participants intuitively perceive systemic organization. Slobin (1971) asserts that rule-governed behavior is indicated by (1) regularities in behavior, (2) extensions of regularities to new instances, i.e., creativity, (3) detection and correction of deviations, and (4) a sense of well-formedness of sequences. Note that a person need not be aware of a rule, or consciously employ a rule in guiding his or her behavior, though the clearest cases of rule-governed behavior do include these qualities (Harré, 1974). Rules are methodological artifacts of the competence paradigm and the concept of rule-governed behavior ought to be understood in this technical sense.

In sum, the competence perspective provides a set of assumptions which, while not directly concerned with behavior, either manifest or potential, are useful for studying structured mental representations which are postulated to underlie the actual production and comprehension of performances. Theory construction employs a methodology which focuses on informants' intuitions of constituents' relatedness and the

well-formedness of sequences. The structure of cognitive representation is described in rule formulations. These statements emphasize the creativity with which individuals produce and comprehend novel instances of behavior. They also recount patterning among units as perceived by individuals, which may be only indirectly derived from manifest surface structure patterns. Competence theories are not accounts of cognitive or behavioral processes, nor of individuals. Competence theories are, in short, no more and no less than generalizations about the cognitive system by which knowledge of the world is abstracted and structured.

CHAPTER II

CURRENT LITERATURE ON COMMUNICATIVE COMPETENCE

Accepting the cognitivist tenets of the competence perspective, it is clear that a theory of communicative competence would not be a theory of communication at all, where communication is construed as interactive behavior. Instead, such a theory would be an idealization of knowledge postulated as underlying the ability to communicate. The goal of a theory of communicative competence would be to reveal structural relations among elements which constitute mental representations of the social world. It is in this light that we undertake to examine the current literature on communicative competence. The criterion applied to select works for review here is that the terms "competence" or "rule" have been used with reference to communication.[2]

A number of communication theorists have worked independently with the notion of rule-governed behavior (Cushman & Whiting, 1971; Hawes, 1973; Hayek, 1967). Also, the term "communicative competence" linked, however vaguely, with a structuralist paradigm appeared as early as 1967 (Slobin, 1967). However, it is apparent that the seed of a concerted movement toward a competence paradigm for communication studies was planted by Dell Hymes' widely circulated manuscript, "On Communicative Competence", eventually published in 1971.

The position Hymes' advocates stems from his consideration of stylistic diversity as the cardinal linguistic fact. He attacks generative grammar's ideal-type assumptions of homogeneous speech communities and linguistics as autonomous from socio-cultural factors, decrying the relegation of these variables to what he describes as the "devalued" category of mere performance (Hymes, 1971, p. 5).

To supplant the grammarians' notion of competence, Hymes stresses the systematicity of language use and claims that

> We have to account for the fact that a normal child acquires knowledge of sentences, not only as grammatical, but also as appropriate. A child acquires a repertoire of speech acts, is able to take part in speech acts and to evaluate the speech acts of others. This is a competence which is integral with attitudes and values concerning language with other codes of communication. Attention to the social dimension of language is thus not restricted to the subtractive effects of social factors. The engagement of language in social life has a positive, productive aspect. (1971, p. 10)

In elaborating this position, Hymes contends that a full account of competence for use would include descriptions of formal possibilities (including grammaticality), psychological and cultural feasibility, contextual appropriateness, and probability of actual occurrences of utterances. Quite explicitly, communicative competence, according to Hymes, is "not merely . . . systemic potential, superorganic property of community, or, indeed, irrelevant in any other way" (1973, p. 324). Individual differences in competence are attributed to differential knowledge (presumably of communication rules) and differential ability for use (including motivation). Ultimately, Hymes' position distills into a definition of communicative competence "as the most general term for the speaking and hearing capabilities of a person" (1971, p. 16).

Now, Hymes intends that the outcome of his proposals be that "the methodological spirit of generative grammar can be extended to the whole sphere of abilities manifest in speech" (1971, p. 11). And to be sure, his notion of communicative competence does point toward the search for patterning and creativity. In addition, this formulation does seem to presume some manner of structured cognitive representations of communicative factors. But more significantly, this approach to communicative competence violates several critical assumptions of the competence perspective. The Hymes conception obscures the distinction between competence and performance. Competence becomes a directly observable property of individuals. The mathematical and ideal-type features of competence metatheory are discarded, thus mitigating against the use of rigorous formalism. In contrast to the mentalistic emphasis of the general competence orientation, Hymes' conception of communicative competence is distinctly behavioral in flavor. In the final analysis, it is not clear how this type of communication theory is fundamentally distinguished from any other.

The majority of scholars following Hymes' lead have similarly adopted a notion of communicative competence which fails to adhere to some essential aspects of competence metatheory. Writing on the subject of syntactic development, for example, researchers like Campbell and Wales (1970), van der Geest, et al. (1973), and Garvey (1975) employ a concept of communicative competence simply to indicate that children's utterances cannot be adequately studied as isolated sentences. Rather, underlying deep structure can be deduced only if

the utterance's functions as revealed by context are taken into consideration. In this usage, the idea of communicative competence is consistent with the more broadly held trend in language acquisition research pioneered by the functional approach by Lois Bloom (1970). However, none of these researchers has attempted to integrate functional or contextual factors into formal theories of language.

In a related area of investigation, functional language development, the concept of communicative competence is used to denote any extra-grammatical aspect of linguistic skill. These abilities include the selection of context-appropriate styles both within and between dialects (Ervin-Tripp, 1971; Hopper, 1971), the faculty of identifying speakers' social identities (Edelsky, 1974), the ability to respond appropriately to questions (Riccilo, 1974), the use of contextual cues to disambiguate questions from requests (Western, 1974), the capacity to execute persuasive strategies (Rodnick and Wood, 1973), adaptation of referential messages in recognition of the informational needs of listeners (Johnson, 1975; Krauss & Glucksberg, 1969), and the general ability to establish relationships with others (Folger, 1974). In the literature on second language acquisition, communicative competence has gained some currency as an equivalent to the ability to engage in spontaneous conversation (Rivers, 1972) and to avoid faux pas when using idiomatic expressions (Paulston, 1974).

Since the movement to adult-like (or native-like) communication skills is a progression toward more effective communication, the literature on functional language development tends to link competence

with "mastery" (Wood, 1976, p. 256) or proficiency (Allen & Brown, 1976). Clearly this qualitative orientation toward performances bears little relation to the cognitive competence perspective. On the other hand, the concern with effectiveness does resemble the distinctly independent construct of interpersonal competence developed by sociologists. Interpersonal competence is "the ability to manipulate others' responses" (Weinstein, 1969) and is bound up with socially adaptiveness, the ability to thrive in social environments. Without doubt, interpersonal competence is a subject worthy of exploration, especially from a developmental viewpoint. However, much valuable theoretical insight is lost if a competence perspective on communication is confused with skill at strategic interaction.

Yet a third category of investigations derives from the concerted interest of students of communicative competence in classroom speech using behaviors of minority culture children. Thus, Philips (1970, 1972) and John (1970) describe the social norms of certain American Indians that result in desultory performances in structured classrooms. Similarly, Cazden (1970) and Bauman (1972) warn educators not to confuse the "true" communicative competence of black students with the typically reluctant and abbreviated recitations directed toward public school teachers. These concerns lead to a call for measures of verbal performance which capitalize on social contexts and functions for speaking as defined by the students' cultures. In this sense, competence is viewed in a manner consistent with that of educational measurement theorists who frequently link the term "competence" with maximal (as opposed to typical) performance testing

(Glaser & Nitko, 1971). The distinction highlighted here is that of ability versus actual performance under less than optimal conditions. Again, this is certainly an issue of great concern. But it is also an issue greatly removed from the realm of the cognitive competence perspective.

Taking as criterial the general assumptions of competence metatheory outlined in Chapter One, all of these works claiming to investigate communicative competence are surely in the spirit of competence studies. For example, Cazden's (1970) definition of communicative competence as "how the child perceives and categorizes the social situations of the world and differentiates his ways of speaking accordingly" (p. 84) is right-headed with respect to the aims of the competence perspective. In a compatible vein, Rodnick and Wood (1973) do refer to "an underlying set of rules, determined by culture and situation, affecting language choices in interpersonal communication events" (p. 115). In practice, however, this body of literature invokes probabilistic norms and behavioral factors, rather than enabling rules, in operationalizing and explicating these concepts. To this extent, they deviate from rigorous competence metatheoretical assumptions.

Now it may be that these comments concerning the "deviance" of current notions of communicative competence turn simply on a point concerning different readings of the term "competence". If this is so, then there is no warrant to expect conformance to the cognitive competence perspective. However, given the development and rationale of the concept following Hymes (1971), this does not appear to be the

case. Rather, it is apparent that scholars in the field of communicative competence have by design placed their work in a framework which is profoundly influenced by theories of linguistic competence.

In addition, if this "deviance" has no consequence for the output of studies of communicative competence, then these comments may be dismissed as terminological nit-picking. Once again, however, it is apparent that the lack of adherence to competence principles is not a vacuous issue. An example, selected not for its shoddiness but rather for its import, may serve to illustrate the consequences of adopting a less than rigorous posture toward the concept of competence.

Susan Philips' excellent accounts of the communicative habits of Warm Springs Indian children are explicitly phrased in terms of rules for appropriate speech usage (Philips, 1970) and communicative competence (Philips, 1972). The reports concentrate on cataloguing conditions under which children's verbal participation was observed, and those under which it was not. These conditions are related to socialization patterns by which children acquire the mediating traits of self-reliance, self-determination, and a dynamic fluidity in assuming leader/audience/participant roles. Generalized to the public school classroom, these qualities result in depressed verbal performances.

Philips' observations, astute as they are, lack any reference to underlying mental constructs which must be postulated in order to account for her data. In terms of a performance model, these underlying rules would assign structural descriptions to social contexts in order to determine if the features of a current situation conform to those

which are criterial in order for a context to count as one in which speaking is appropriate. Of course, the explanatory richness of the performance model is function of the degree to which the postulated, internalized rules have been explicated in a comprehensive manner. As Schneider (1975) argues, although a researcher may claim allegiance to a rule-governed perspective, he or she is operating in a "classical paradigm" if the ultimate goal of the investigation is something other than the illumination of underlying cognitive categories and operations. Such is the case with Philips' work. The consequence of her failure to conform to the goals of competence metatheory, rigidly conceived from a cognitivist point of view, is that the resulting performance model fails to attain a depth and richness of explanation which certainly seems a desirable attribute.

Despite the range of emphases and theoretical rigor described above, several generalizations may be made about the common core of the communicative competence school as it is currently envisioned. Adherence to the communicative competence perspective is motivated by the belief that the concept of linguistic competence is too narrow a concept, failing to encompass essential facts about language use. The touchstones of communicative competence formulations include the principle that invariance in underlying language structure is coupled with wide variation in language use (Gumperz, 1971). Language is viewed as primarily a functional instrument that operates in social contexts. And on the basis of these contexts and functions, speakers adapt their utterances by selecting systematically from their repertoires of grammatically feasible structures (Hymes, 1973).

In addition, most communicative competence theorists have apparently adopted the position that the study of language in its social context necessitates a denial of the mentalistic orientation associated with rigorous competence metatheory (cf. Labov, 1972). Quite to the contrary, this paper supports the stance that use of the term "communicative competence" ought imply "a very strong claim; that we consider communicative behavior to permit creativity and to reflect inherent forms which communicators 'know' and base perceptual judgments on. If we do not intend this claim, then the use of the term is misleading, if not vacuous" (Sanders & Schneider, 1972). According to the view of this paper then, specified distinctively in light of the goals, methods, and assumptions inherent in the general competence paradigm, a theory of communicative competence is best conceived as a grammar of communication, a set of rules which may be postulated as underlying the communicative behavior of an ideal member of a speech community.

It should be noted that a small group of theorists, apart from the mainstream of those associating themselves with communicative competence, have indeed adopted a rule-systemic and cognitivist perspective quite consistent with competence metatheory. Schneider (1975), for example, sought to "go beyond the surface of communicative behavior and explore the depths of communicative knowledge" (p. 11). Toward this end he conducted an experiment investigating culturally diverse informants' intuitions about the well-formedness of certain intention-situation-utterance constellations. In a consanguine spirit, Sankoff (1974) argued that quantitative studies of speech behavior "can

be fruitfully used in demonstrating not only the general patterns existing within a speech community, but also the subtle distinctions internalized by individuals" (p. 20). A similar metatheoretical stance is taken in an essay by Habermas (1970) which is concerned with the etiology of both pathologically distorted communication as well as normal failures of intersubjectivity. Habermas suggests that therapists, indeed all individuals, have tacit knowledge allowing the recognition of accurate expressions of intentions. From this premise he develops a notion of communicative competence which "is defined by the ideal speaker's mastery of the dialogue-constitutive universals irrespective of actual restrictions under empirical conditions" (p. 369).

Having declared for this type of understanding of the concept of communicative competence, the following sections of the paper explore several classes of empirical and theoretical findings pertaining to rule formulations of communication. The goals of this analysis are to demonstrate that a competence perspective does, in fact, fit the data of language use, and to establish precedent for handling these data by means of competence theories. These findings will aid, finally, in formulating some more specific comments about the nature of communicative competence than have been proferred thus far.

CHAPTER III

ETHNOGRAPHIC-SOCIOLINGUISTIC EVIDENCE

The ethnography of speaking (Hymes, 1962) arises from the anthropologists' concern with the study of "speaking as an activity in its own right" (p. 101). Sociolinguistics, quite naturally, arises from the amalgam of sociological and linguistic endeavors, the description of socially stratified linguistic variables (Fishman, 1970; Pride, 1970). The two fields coincide in that their common object of concern is what structural linguistic tradition (including generative-transformational grammar) dismisses as "free variation" (Fisher, 1958; Labov, 1972). The traditional supposition has been that of a homogeneous speech community in which variation in the use of forms serving the same referential function could be ignored. In a typical account, for example, the forms /dis/ and /this/ would be noted as allomorphs, linguistically equivalent. The sociolinguist, or linguistic-ethnographer, on the other hand, observes the variation and finds its distribution and social significance worthy of investigation.

Speech varies not only along demographic dimensions, as long recognized by dialect geographers, but also along dimensions of context or communicative situation. The principle of contextually dependent interpretation has long been a tenet of ethnographic methodology (Malinowski, 1935), but has only recently been introduced to explain linguistic variation within a speech community (Labov, 1966). Relevant

aspects of context include the relationships between participants in an interaction (Blom & Gumperz, 1972), the topic of discourse (Greenfield & Fishman, 1971), and occasion (Toelken, 1971).

In the course of investigating language in context, it has been found that identical linguistic forms may serve different communicative functions in different contexts and, conversely, different linguistic forms may serve identical functions in different contexts (Hymes, 1962). Indeed, the identification of form-function-context dependencies may be viewed as the core of the ethnographic and sociolinguistic enterprises.

One function which has received considerable attention from ethnographers and sociolinguists is status marking (Lakoff, 1973b; Shuy, Wolfram & Riley, 1967). The reciprocal function, determining social identities on the basis of language, has recently been treated from the point of view of communicative competence (Edelsky, 1974). As conceptualized primarily through the work of William Labov (1966, 1972, 1973), linguistic status markers are viewed not as fixed features, but rather as variables which are governed in a systematic fashion by context. Among New York City speakers, for example, Labov (1966) found that post-vocalic /r/ deletion is a reliable status marker in informal contexts, but that under more formal conditions all speakers retain more post-vocalic /r/, and lower middle class individuals may actually overshoot the prestige speech norm. Similarly, Black English Vernacular dialect is not uniformly distributed within black speech communities, but rather high incidences of dialect features correspond to the performance of a peer group affiliation function (Labov, 1973).

The ethnographic-sociolinguistic perspective, then, provides data about the interdependencies between stylistic or linguistic variation, social contexts, and interpersonal functions. What is important to the case for communicative competence is that these interdependencies have been shown to be rule-governed (in Slobin's sense). That form-function-context regularities are extended to new instances--creativity--is demonstrated by children's facility at using language appropriately in novel situations (Ervin-Tripp, 1971). Individuals can detect inappropriate code usage with considerable (and often embarrassing) acumen (Garfinkel, 1967; Goffman, 1959). Finally, people do have a sense of which language behavior sequences are constituted correctly with respect to social variables (Noefsinger, 1975; Schegloff, 1968). It seems highly justified, then, to postulate a model of mental representation underlying discourse abilities in terms of sociolinguistics (Ervin-Tripp, 1972) or speaking (Bauman, 1972; Humes, 1962) rules.

Ervin-Tripp (1972) offers substantial insight into the nature of such sociolinguistic rules. She distinguishes three types of rules which operate at all levels of discourse from the phoneme to the interactional episode. Alternation rules choose from a set of referentially equivalent expressions on the basis of "social selectors" corresponding to the role attributes of participants. Co-occurrence rules legislate stylistic consistency once alternation rules have been employed. Horizontal co-occurrence restrictions ensure consistency between sequential items in a discourse string while vertical co-occurrence rules pertain to consistency of an item's presentation

at each level of analysis (e.g. sophisticated lexical items are pronounced with standard phonology; standard pronunciation of argot may very well constitute an "ill-formed" formative). Finally, sequencing rules concern appropriate ordering of speech acts within a portion of discourse (e.g. requesting precedes entreating).

In a nonformal, process-oriented approach it may be said that members of speech communities have internalized a common set of such sociolinguistic rules. By means of these rules, social meanings or nonliteral significations are encoded and deciphered. Thus, for example, a student addressing a professor as "Sir" signifies an entire constellation of beliefs and role postures. And regardless of the degree of deference with which one perceives contemporary professors, all members of middle class American speech communities are capable of reading the social meaning encoded in this simple utterance.

However, Ervin-Tripp apparently has in mind a more formal notion of rule, one which conforms precisely to the premises of the competence paradigm. Describing her diagrammatic notation, Ervin-Tripp writes

> Note that the set of paths, or the rule, is like a formal grammar in that it is a way of representing a logical model. The model is not intended as a model of a process, of the actual decision sequence by which a speaker chooses a form of address or a listener interprets one. The two structures may or may not correspond. In any case, the task of determining the structure implicit in people's report of what forms of address are possible and appropriate is clearly distinct from the task of studying how people, in real situations and in real time, make choices . . . [T]wo individuals might have different decision or interpretation procedures for sociolinguistic alternatives but have the identical logical structure to their reports of behavior. (1972, p. 220)

Considerations such as these have led Grimshaw (1973) to conclude "there may very well be grammars of social interaction for societies . . . in a quite precise analogue to the linguists' rules of grammar" (p. 290). Clearly, then, the ethnographic-sociolinguistic perspective lends strong support to the concept of communicative competence.

CHAPTER IV

FORMAL-SEMANTIC EVIDENCE

Formal studies of language are those investigations of linguistic competence conducted under the generative framework now current in linguistics. Especially significant to the purposes of this essay are those suggestions made by some linguists, in attempting to solve certain formal problems in syntax, that rules of grammar must have reference to communicatively relevant social features. The semantic perspective, while of increasing importance to formal linguistics, originated from the study of meaning in philosophy. A branch of the philosophy of language, speech act theory, deserves particular attention since it points to a functional account of meaning and postulates a rule-governed system. The formal and semantic perspectives are linked here under a single category since they are both concerned with abstract systems transcending the individual, because they are both understood in terms of rules, and because ultimately they overlap considerably despite their different points of origin.

By and large, mainstream formal linguistics operates under the assumption that syntax should be studied independently of semantics and also that syntax is more revealing of the nature of language (Chomsky, 1965). Typically, syntactically motivated arguments have the

greatest persuasiveness in linguistic circles. Thus, a fruitful line of investigation involves those cases in which semantic information is necessary in order to account for syntactic relations. For example,

(4) That is the car which broke down

(5) That is the traitor who broke down

are grammatical, but

(6) *That is the car who broke down

(7) *That is the traitor which broke down

are not. (An asterisk preceding a string signifies that the string is not well-formed.) The rules of English syntax determine that "who" replaces deep structure noun phrases which are marked as human-like, while "which" replaces deep structure noun phrases which are marked as nonhuman-like. Semantic facts which determine the distribution of morphemes like "who" and "which" are called selectional restrictions (Chomsky, 1965). Violations of selectional rules result in ungrammatical sentences. [Interestingly, Chomsky (1965) notes that sentences which contain such violations are naturally interpreted as having been used metaphorically, or else as having been taken out of some rich linguistic context (cf. Harré, 1974).]

Selectional restrictions are closely related to the entailments (Fillmore, 1971) or presuppositions (Hutchinson, 1971; Keenan, 1971; Lakoff, 1971a, 1971b; Landesman, 1972) which a speaker makes in uttering a sentence. (For the sake of convenience, one may discuss the presuppositions of a sentence, which, in fact, are fictional entities.) Sentences (6) and (7) above are not well-formed because their presuppositions contradict selectional restrictions on their noun

phrases. For further illustration of the role of presupposition in grammar, note that the verb phrase "broke down" presupposes a prior state of proper repair:

(8) The car was working fine when it suddenly broke down

(9) *The car was not working at all when it suddenly broke down

Presuppositions, then, are propositions which are not explicitly encoded in a sentence, but are understood in the course of interpreting a sentence. A major source of presuppositional information is the selectional restrictions on linguistic formatives. Selectional restrictions, in turn, are essential factors in syntactic description. Thus, the acceptability of the presuppositions of a sentence is an important factor in making judgments of grammaticality.

George Lakoff (1971a) notes that individuals may differ in their assignment of selectional restrictions to linguistic formatives, and hence in their judgments of the grammaticality/acceptability of given sentences on the basis of the presuppositions of those sentences.

(10) ?The dog knew his master was home

Sentence (10) presupposes that the subject possesses the property of thoughtfulness. For some English speakers, the noun "dog" may be marked with selectional restrictions consistent with that presupposition, while for other speakers, the selectional restrictions on "dog" may contradict the presupposition. Nevertheless, all English speakers tacitly know that someone who utters (10) is attributing thought to the dog. Lakoff concludes that linguistic competence does not legislate acceptable presuppositions, but rather (among other things) pairs sentences with their corresponding entailments. Specific judgments as

to the well-formedness of sentences depends on the belief system of the particular judge (Hutchinson, 1971). In short, it is a function of formal linguistic competence which permits speakers to draw certain inferences about the beliefs of those who utter sentences.

Thus far, only logical presuppositions of sentences (Keenan, 1971) have been discussed. These are a class of propositions which is defined in terms of truth values or logical consequences. In addition, many, perhaps all, sentences contain presuppositions which refer to social factors. Typically called pragmatic presuppositions (Lakoff, 1973), Keenan (1971) describes them as follows:

> Now many sentences require that certain culturally defined conditions or contexts be satisfied in order for an utterance of that sentence to be understood (in its literal, intended meaning). Thus these conditions are naturally called presuppositions of the sentence. If they are not satisfied, then the utterance is either not understandable, or else understood in some non-literal way--insult or jest for example. These conditions include among others: (a) status and kinds of relations among participants; (b) age, sex, and generation relations among participants; (c) status, kin, age, sex, and generation relations between participants and individuals mentioned in the sentence; (d) presence or absence of certain objects in the physical setting of the utterance; and relative location of participants and items mentioned in the sentence itself. (p. 49)

Pragmatic, as well as logical, presuppositions are crucial for syntactic description. Japanese, as well as certain other Asian languages, has a complex system of linguistic particles whose sole function is to signify the kinds of conditions described by Keenan in (a), (b), and (c) above (Peng, 1974). Violations of co-occurrence restrictions between these particles result in contradictory pragmatic presuppositions, and hence in judgments of ungrammaticality (R. Lakoff, 1971). The use of alternate forms of the French second person singular

pronouns ("tu" and "vous") must also satisfy pragmatic presuppositions or else result in ill-formed sentences in certain cases (Keenan, 1971). English, too, exhibits some roughly analogous syntactic phenomena:

(11) I'd like you to meet my dearest friend, Morris

(12) *I'd like you to meet the most distinguished professor of German philology in the world, Morris.

The selectional restrictions on the noun phrase "my dearest friend" are consistent with some presupposition derived from the use of an untitled proper noun referring to a person. Most English speakers would read "Morris" in (11) as a first name because the presupposition of first name use most closely parallels the selectional restrictions on the appositive noun phrase. On the other hand, all readings of (12) yield a contradiction between the semantic features of "the most distinguished professor of German philology in the world" and the presupposition derived from the use of "Morris" in apposition. This data is clearly similar to that discussed previously in terms of the ethnographic-sociolinguistic perspective. The coincidence of the findings from the different perspectives only serves to strengthen the view that much of communicative behavior is a competence phenomenon.

Additional evidence of the encoding of pragmatic presuppositions in grammar involves the presupposition of reciprocity of action derived from the intonation contours of sentences like (13):

(13) Mary kicked John and then John kicked her.

George Lakoff (1971b) observes that any compound sentence with agent and object inverted in the two main clauses and which is marked with an intonation contour like that of (13) carries with it the presupposition of reciprocity.

(14) Mary called Joe a Republican and then he insulted her

(15) Mary called Joe home for dinner and then he insulted her

(16) *Mary saw Joe and then he insulted her

Sentences (14) and (15) are grammatical only if the actions represented in the first clauses are somehow equivalent to those represented in the second clauses. In any event, the speaker of English is able to ascertain that whoever uttered (14) believes it is an insult to be called a Republican and that whoever uttered (15) believes that it is an insult to be called home for dinner. Sentence (16) is judged ungrammatical because seeing someone does not constitute an insult in Western culture. (More precisely, the context in which seeing someone constitutes an insult is so specific that speaking rules would call for the context to be specified in the immediate linguistic environment.)

Findings on presupposition such as these emerge from the formal study of syntax. They indicate that certain beliefs are nonexplicitly encoded in sentences and that grammatical rules must have reference to these beliefs. That is to say, an adequate formulation of linguistic competence must have the means to represent presuppositional content. Among these presuppositions are beliefs about the social world, including the relations between participants in communicative events. In short, aspects of communicative competence have already been anticipated by the formal study of language.

Now it must be noted that the sorts of interpretations which rely on the concept of pragmatic presupposition are far from acceptable to many linguists, particularly as these explanations have been used to

support the doctrine of generative semantics (Lakoff & Ross, 1973). Katz and Bever (1974), for example, take the more orthodox position arguing that the generative semanticists' data can be accounted for extra-linguistically in terms of perceptual strategies, conversational implicatures (Grice, 1967), and cultural stereotypes. They further claim that discussions of such issues as pragmatic presuppositions in the realm of syntactic theory carry with them the danger of regression to empiricism and probabilistic explanation. While the Katz and Bever position bodes poorly for the prospects of formal theories of communicative competence, a more promising clarification is offered by Chomsky, himself. Chomsky (1975, p. 54) also argues strongly for the autonomy of grammar vis-a-vis theories of human relations, but nevertheless suggests the probability that communicative function may be conceived as an independent system organized by principles similar to those governing language proper. Certainly it is beyond the scope of this essay to decide the issue of grammar's autonomy. (Although one cannot escape the reasonableness of the middle ground: some communicative constraints enter into the derivation of sentences and some linguistic rules place constraints on style.) What is important for our purposes is the realization following from formal studies of syntax; to whit, that matters pertaining to communicative relations can be represented within a competence framework. And this conclusion does not appear to be endangered by arguments concerning the autonomy of grammar per se.

Linguists have been far less concerned, and also far less successful, in dealing with semantic description than with syntactic description.

One of the earliest, and still paradigmatic, semantic theories of comprehensive scope developed within the generative-transformational framework is that of Katz and Fodor (1963). Briefly, their theory asserts that the meaning of a sentence is due to the concatenation of semantic features associated with the sentence's constituents. Moreover, Katz and Fodor explicitly reject any consideration of nonlinguistic context in accounting for meaning. However, this approach to meaning invested in isolated sentences is marked by its inability to disambiguate most sentences (Bolinger, 1965). At best, the theory is capable of dealing with only absolutely literal meaning (Weinreich, 1966).

In contrast to Katz and Fodor's avoidance of extra-linguistic factors, the current trend in linguistics seems to look toward theories of meaning tied to language use in real situations (R. Lakoff, 1971). The notion that the meaning of a sentence is determined by the functions and contexts in which it is used is due to the school of philosophy known as ordinary language philosophy.[3] An early philosopher in this vein, Ludwig Wittgenstein (1953) described language as a game with rules for using expressions. To mean something by using a symbol is to use that symbol according to the rules of the game. To understand an expression is to know the rules which governed its use in a particular situated utterance.

The theory of speech acts is an attempt to elucidate the rules for language use. The theory was sparked by J. L. Austin's (1962) finding that people may use language for a variety of functions beyond predication and reference. This discovery led Austin to establish the

categories of locutionary and illocutionary speech acts. Locutionary acts correspond to the formulation of propositions as

(17) The sun rises in the west.

But it is illocutionary acts that constitute the major focus of speech act theory. They are easy to identify when their expressions are marked by explicit performative verbs:

(18) I pronounce you man and wife

(19) I christen this ship the Annabelle Lee

(20) I pledge you my support

(21) I question your motives

(22) I challenge you, cur.

Clearly, the utterance of locutions like (17) does not make the state of affairs described therein occur. However, illocutionary acts are, in fact, accomplished in the uttering of expressions like (18) - (22). By uttering (18), for example, in accordance with conventions for the use of that expression, the speaker does make a pledge, regardless of whether the pledge is honored subsequently.

Illocutionary speech acts, however, are not always marked by explicit performative verbs. In such cases, the context of utterance serves to make the illocutionary force apparent. Thus,

(23) It's cold in here

uttered on a certain occasion (in a room made cold by an obvious open window) by a speaker standing in a certain role relation to a listener (master to butler) may have the same illocutionary force as

(24) I order you to close the window

(Gordon and Lakoff, 1969). Another example of how context may illuminate nonexplicit illocutionary force is the familiar sentence

(25) Can you pass the salt?

uttered at the dinner table. Although (25) has the surface form of a question, a simple verbal response would be inappropriate. Rather, (25) conventionally has the force of a request.

It appears then that illocutionary acts cannot be differentiated from locutionary acts by any linguistic surface structure features. Indeed, it is likely that all realized sentences are illocutions and that locutions cannot be generated in isolation (Searle, 1968). Therefore, sentences like

(26) Mary hit John

must contain at some level of representation a performative like "I report to you that . . ." or "I assert to you that . . .". This analysis is independently corroborated by linguist John Ross (1970) who argues on the basis of some troublesome pronominalization phenomena that explicit performative verbs appear in the deep structures of declarative sentences and then are optionally deleted by transformational rules. Although locutions cannot be realized without some illocutionary force, some utterances may be entirely illocutionary, with no propositional or locutionary content:

(27) Hello

On the basis of demonstrations such as these, the illocutionary act may be considered the primary unit of linguistic communication (Wallace, 1970).[4]

While the concept of illocution is clarified by differentiating it from locution, the most distinctive definitional attribute of illocutions is that they cannot be assigned truth values (Austin, 1962).

(28) I behave at Aunt May's house

(29) I promise to behave at Aunt May's house

(30a) That's not true

(30b) You're not being sincere

To contradict (29), one would use (30b), but not (30a). On the other hand, assuming that (28) is meant literally as a report or assertion, it is most appropriately negated by (30a). [The fact that it may be somewhat acceptable to contradict (23) by (30b) is evidence that the mental representation of (28) contains some illocutionary force marker.] Notice that (28), whose surface structure resembles the propositional or locutionary content of (29) is susceptible to truth judgments. But it is senseless to judge illocutions as true or false because they come into existence simply as a consequence of their utterance. However, the appropriateness of (30b) as a response to (29) indicates that illocutionary acts do occasionally run amiss of conditions other than truth value. These speech act conditions may be recognized as the pragmatic presuppositions of illocutionary expressions (G. Lakoff, 1971a). Austin (1962) proposes the terms "felicitous" and "infelicitous" to describe the well-formedness of speech acts with respect to their conditions. It is possible to enumerate the conditions for felicitous speech acts and thereby come one step closer to formulating rules for using language to mean something.

The nature of felicity conditions can best be understood by example. John Searle (1969) has proposed a set of conditions which is necessary and sufficient for the felicitous performance of the speech act of promising. The following felicity conditions are adapted from Searle's:

C1. Normal input-output relations obtain. That is, the speaker, S, and the hearer, H, use the same linguistic code; no physical impediments to production or reception are present; S is not being coerced; the speech act is not "parasitic" as in literature, joking, etc.

C2. S expresses a proposition, P, in uttering U.

C3. P predicates a future act, A, of S.

C4. S believes that H would prefer that S to A. Interestingly, utterances of the form "I promise you that . . . . " which do not fulfill (C4) often have the illocutionary force of threats.

C5. It is not obvious to S, and S believes it is not obvious to H, that S would do A in the normal course of events. This is an instance of the more general speech act condition: there is a point to performing an illocution. (Thus, it is an insult to state well known information in detail to a knowledgeable audience because such statements presuppose ignorance.)

C6. S intends to do A. Sentence (30b) points out a violation of this condition.

C7. S believes that by uttering U, S is obligated to do A.

C8. S intends that the utterance of U will result in H's knowing that (C6) and (C7) and S intends that H will know that (C6) and (C7) by virtue of H's knowledge of the conventional significance of U. In other words, S utters U so that H will know that S intends and is obligated to do A. Moreover, S intends that H will know this because H knows the non-natural meaning of U, and for no other reason. This condition specifies the perlocutionary effect (knowing) that S hopes will transpire. The condition does not specify that this perlocution must transpire. Also, if the perlocution does occur, S hopes that it comes about because he or she has spoken meaningfully (rather than because H expects that a promise is in order at that point in the conversation, for example).

C9. U uttered in the context of discourse does conventionally presuppose (C1) - (C8). That is, S has used the appropriate linguistic formula for his or her purposes. This condition, it must be acknowledged, glosses over complex matters of literal meaning.

From felicity conditions or pragmatic presuppositions such as these, it can be seen that the relative roles of participants in a communicative event have great bearing in the well-formedness of speech acts. The speaker must perceive the hearer's level of knowledge and needs, and these perceptions are encoded in the speech act. Conversely, the hearer, having knowledge of felicity conditions and having no

reason to believe that any have been violated, can use the speech act as a basis for perceiving the speaker's beliefs.

Once the felicity conditions for the performance of a given speech act are ascertained, speech act theory holds that rules may be extracted. Speech act rules belong to the class of constitutive rules. Such rule systems have the effect of bringing arbitrary phenomena into being. A rule regarding eating might regulate that activity (as in "Chew well before swallowing") or even establish etiquette for performing the activity (as in "Say Grace before meals"), but the activity of eating is undoubtably a precursor to any such rules. A wedding banquet, on the other hand, is governed by rules, some of which serve to constitute the event (as in "Participants would not be present were it not for the wedding"; an event similar in all aspects of surface realization would not constitute a wedding banquet if this rule were violated). Similarly, a brute vocalization may exist prior to any rules which regulate it, but illocutionary acts like promising, pledging, christening, etc., come into existence because they are constituted by arbitrary rule systems.

The mechanism of meaning, which was the issue which spawned interest in the theory of speech acts, may now be re-examined. Constitutive rules are intimately related to both illocutionary acts and meanings. Searle (1969) asserts that

> . . . the semantic structure of a language may be regarded as a conventional realization of a series of sets of underlying constitutive rules, and that speech acts are acts characteristically performed by uttering expressions in accordance with these sets of constitutive rules. (p. 37)

That is, a person means something by an utterance when he or she uses the utterance to perform an illocutionary act in accordance with constitutive speech act rules. The conventions alluded to earlier in characterizing the concept of non-natural meaning are captured in speech act rules. People understand each other because they share a system of rules for language use. Perhaps the closest one can come to identifying meaning is to equate the meaning of an utterance with that process which is represented by the rules for using the utterance in the performance of felicitous speech acts.

Thus, the search for the nature of meaning points to a competence formulation. The theory of speech acts grows out of the view that meaning can only be adequately described in terms of function. The conditions for performing felicitous speech acts are ultimately transformable to rules for using utterances meaningfully. It is clear that constitutive speech act rules are conceptually equivalent to cognitive rules of the type characteristic of competence theories. Speech act rules reflect the structure of speech acts in the minds of competent communicators.

Three problems of relating speech act theory with communicative competence can be pinpointed, however. First, speech act rules must be formalized in a manner consistent with linguistic notation in general (G. Lakoff, 1971). This means that contextual and functional features must be specified with mathematical precision. While structural taxonomies of symbol systems have been developed and refined over centuries, no such accretive effort has taken place with respect to contextual and functional taxonomies of symbol systems. Speech act rules formulated by Searle (1969) and Labov (1972) are

relatively informal. On the other extreme, some formalizations, like those of Gordon and Lakoff (1971), are highly ad hoc. A second barrier to incorporating speech act theory within the framework of communicative competence is that the theory tends to deal only with function and context, and ignores their interaction with form or symbol structure. Conditions like (C9) above serve to gloss over important findings of the ethnographic-sociolinguist perspective. Speech act rules must be designed so that they can generate and interpret representations of specific situated utterances. Finally, it has not been adequately demonstrated that speech act rule systems possess the rich systemic structure characteristic of competence formulations. Speech act rules must be hierarchically organized and generalizable across varieties of illocutions in order to satisfy general competence principles like constructionism.

Recognizing the need for greater formalization, contact with linguistic analysis, and systematicity in speech act theory, some recent work aims toward a remedy. Travis (1971) offers the sketch of a generative theory of speech acts. While Travis does offer some insights, such as the necessity for a READING component (e.g. literal, ironic, etc.), he becomes mired in the yet insoluble problem of unique reference and, by admission, the usefulness of his conceptualization awaits the arrival of an adequate theory of denotation. A more immediately helpful analysis is presented by Searle (1976). Searle presents twelve criteria by which illocutionary acts may be more or less uniquely taxonimized. On the basis of these features, he established five general categories of illocutions and proceeds to

demonstrate that the categorization is consistent with certain syntactic properties of verb classes. It is certainly true that the criteria are in need of further refinement and elaboration. However, the labor promises to bring formal theories of communicative competence closer at hand.

CHAPTER V

COGNITIVE-DEVELOPMENTAL EVIDENCE

Central to the cognitive-developmental framework is the theorizing of Jean Piaget. Piaget (1950, 1970) asserts that the goal of cognitive-developmental psychology is to determine how children gain knowledge of the world. Very briefly, a subject comes to know objects by acting upon, manipulating, them. At first such operations are sensory-motor manipulations. As the child assesses coordinations between actions and consequent perceptions of objects, he or she constructs logico-mathematical cognitive structures to which future object perceptions may be assimilated or which may be altered to accommodate deviant perceptions. With the onset of logico-mathematical structures, the child begins to perform true cognitive operations on the perceptual world (concrete operations stage) and later on abstract entities (formal operations stage).

It is quite clear that Piaget's logico-mathematical structures are identical to the mental representations of competence theories and that cognitive-developmental psychology is, in fact, the study of changes in children's competence formulations. Piaget (1970) states that ". . . the subject's conscious thought processes . . . are inconsistent and incomplete. But behind conscious thought are the 'natural' operating structures" (p. 729). This account is, of course,

highly reminiscent of Pylyshyn's description of competence as "a more perfect mathematical structure underlying behavior." Moreover, Piaget (1970) implicitly links his cognitive-developmental theory with the general competence paradigm by observing that ". . . the contemporary work of Chomsky and his group on transformational grammars is not very far from our own operational perspectives and psychogenetic constructivism" (p. 729). It is also instructive to note that in the Piagetian view, objects (whether physical or abstract) are acted upon resulting in the construction of logico-mathematical structures, just as in the more general competence paradigm formatives are acted upon by rules in order to generate mental representations of whole structures; both are constructivist. A final similarity between Piagetian developmental theory and competence theories is the use by both of formal logical models to describe the structure of behavior (Ginzberg & Opper, 1969).

The general teleological principle of cognitive growth is decentration (Piaget, 1970; Feffer, 1970; Rubin, 1973). Young infants exhibit the most radical form of centration: all objects are aspects of the subject. The child's interaction with the environment soon stresses this early cognitive structure to the point of change (Kohlberg, 1969). Eventually the child becomes aware of the integrity of objects, and of the fact that objects have parts or aspects. But the subject's cognitive makeup at this point only enables him or her to focus on one aspect of the whole object at a time. At a given moment, only a single, perceptually concrete perspective can be maintained. Feffer (1970) refers to such cognitive operations as sequential decentering. Typical of this stage is the child who sees water emptied from a fat beaker into a thin one and claims that there is more water in the second vessel on the basis of the height of the water column. The

child cannot simultaneously relate the increase in height with the decrease in width (Ginsberg & Opper, 1969). Finally, children develop the adult-like ability to hold several alternative perspectives on the same object simultaneously. Not only can several perceptually given aspects of an object be incorporated into a single perspective, but other perspectives may be inferred and accepted as mutually consistent (Wolfe, 1963). At this stage of simultaneous decentering (Feffer, 1970), different part-whole relations may be apprehended and the appropriate point of view for the performance of a task selected. Thus, when a child is nine or ten years old, he or she can correctly pair a spatial orientation other than his or her own with a photograph of a three-dimensional structure from that other orientation (Flavel et al., 1968).

Decentration relates not only to the child's physical world, but also to the social environment. Since decentration refers to changes in competence formulations, findings which relate the decentration process to children's communication constitute additional evidence supporting theories of communicative competence. In one of his earliest works, The Language and Thought of the Child (1926), Piaget demonstrated that the speech of young children is basically egocentric and often serves no communicative purpose. As the child develops, egocentric speech becomes less frequent and socialized speech predominates. Socialized speech consists of answers, threats, commands, questions, etc. (reminiscent of an inventory of speech act functions). In short, socialized speech is adapted to the needs and role characteristics of the listener.

Although some scientists dispute Piaget's assessment of the magnitude of egocentric speech in early childhood, claiming that communicative intent is present even in very young children (Borke, 1971; Mueller, 1972), it seems certain that decentering and the development of skills for effective communication are intimately related. Because of egocentrism, the inability to recognize the perspectives of others, younger children can phrase messages in only one way: that way which makes sense to themselves. Empirical investigation (Glucksberg & Krauss, 1967; Peterson, Danner & Flavell, 1972) indicates that children around four years of age are relatively impervious to feedback revealing communicative failure, and have difficulty recoding messages even when explicitly asked. Such children describe abstract figures in singularly idiosyncratic fashion (e.g. "mommy's hat") and evidence no realization that these descriptions may be uninterpretable by others (Krauss & Glucksberg, 1969). Conversely, Western (1974) has demonstrated that older children are more likely to perceive alternative interpretations of functionally ambiguous speech acts than are younger ones.

Of primary concern to developmental psychologists concerned with the decline of egocentric speech and the ontogenesis of social communication is the process of role-taking. Role-taking is differentiated from role-playing or enactment in that the former is a cognitive operation, probably prerequisite to the actual performance of others' roles. Role-taking may be thought of as a type of person perceptual strategy involving an inferential process and resulting in a representation of another's point of view (Flavell, 1966).[5]

The concept of role-taking has been the subject of a great deal of cognitive developmental research. Some of this work has been concerned with antecedents of role-taking skill (Kerckhoff, 1969; Hollos & Cowan, 1973; West, 1974). Still other studies have sought to relate role-taking to other areas of social skill such as moral reasoning (Irwin, 1973) and interpersonal adjustment (Rothenberg, 1970). However, two classes of data concerning role-taking are particularly important for our purposes. First, we shall wish to know to what extent role-taking partakes of the same processes and developmental patterns as does impersonal perception. For to establish this relationship is to confirm the classification of role-taking as a decentering, and therefore competence, phenomenon. Second, in order to bind the concept of role-taking into the competence paradigm for communication in particular, it is important to investigate correlations between measurements of effective communication and independently assessed role-taking skill.

In a review of developmental research on social cognition in general, Shantz (1975) provides a theoretical statement of the parallelism between person perception (including role-taking) and general cognition: ". . . development involves basic transformations of cognitive structure . . . Thus understanding others is not merely a matter of 'learning more' about people in some quantitative sense; it is organizing what one knows into systems of meaning and belief" (p. 9). Empirical support for the close link between general cognitive structure and role-taking ability is provided by comparisons between normal individuals and cognitively arrested people who are otherwise

comparable. Devries (1970), Feffer (1970b) and Milgram (1960) all confirm the hypothesis that mentally retarded subjects role-take poorly relative to normal ones. Stronger support for this Piagetian position is provided by Feffer and Gourevitch (1960), Rubin (1973), Selman (1971), Sullivan and Hunt (1967) and Wolfe (1963) all of whom administered various role-taking tasks to children along with various conceptual and/or perceptual measures of cognitive decentration. Significant correlations between the two types of tests were found at the several age levels investigated. Selman and Byrne (1974) interviewed children concerning their understanding of moral dilemmas. On the basis of age-related changes in social explanation, they concluded that role-taking is amenable to structural-developmental analysis. However, it must be noted that correlations in this entire body of literature are moderate in degree and that some disconfirming findings have also been reported (Hollos & Cowan, 1973).

If the relationship between role-taking and general cognitive decentering has been demonstrated less than adequately, then findings linking role-taking to communicative skill are even less dramatic. In the body of research attempting to establish the correlation between role-taking and effective communication, the communicative variable has usually been operationalized as referential accuracy, the correct and/or effective description of some visual array to a listener who does not share the speaker's perceptual field (Glucksberg & Krauss, 1967). With communication skill thus defined, Rubin (1973) found a rather high correlation between role-taking and communication. Chandler, Greenspan and Barenboim (1973) and Johnson (1974) also report

significant correlations, but to a lesser degree. Hollos and Cowan (1973) employed factor analysis to demonstrate a unidimensional structure underlying the two variables. On the other hand, Piche et. al. (1975) found virtually no empirical justification for linking communication to role-taking. Still other investigators have found complex interactions wherein role-taking is related to communciation for some ages, but not for others (Kingsley, 1971), and in a feedback situation, but not when feedback was disallowed (Feffer & Suchotliff, 1966).

In addition to such attempts at directly correlating measures of communication and role-taking, training studies involving instructional intervention may be pertinent to establishing the link between the two constructs. Botkin (1966) engaged a group of sixth graders in a program of communication instruction. While general "communication goodness" showed little appreciable gain at post-test, role-taking skills did improve significantly. Chandler, Greenspan and Barenboim (1973) trained one group of youngsters in role-taking only and another in both role-taking and referential accuracy tasks. They found that only the second treatment improved communication skills while both resulted in improved role-taking. Both of these training studies point to the conclusion that role-taking is a necessary, but not sufficient ability for communication effectiveness.

Reviewing the literature concerning the putative dependency of effective communication on role-taking ability, Glucksberg, Krauss and Higgins (1975) find empirical support for the relationship "sparce". Without conceding that such a relationship does not exist, at least three

alternatives are available to explain this empirical failure. First, very little is known about the nature of the measurement instruments employed. While most appear to be logically well motivated, test-retest reliabilies and other psychometric characteristics are not reported. Our research tools may not be adequate to the job. Second, as Piche et. al. (1975) note, neither role-taking nor communication effectiveness is a unitary construct, yet the correlational studies discussed above treat them as if they were. Tests may be differentially sensitive to the various subskills or certain communication tasks may require the application of some role-taking subskills but not others. Our analyses may not be fine-grained enough. Finally, there has been considerable laxity in the definition of what behaviors constitute role-taking. For example, the kind of social sensitivity to stereotypes measured by Milgram's (1960) instrument has been found, in other contexts, to be quite independent of sensitivity to specific individuals (Cline, 1964). It may be that instruments which claim to measure role-taking are measuring some other, quite different, processes.

Despite these methodological difficulties in demonstrating the relationship between role-taking and effective communication, however, it still appears warrantable to claim that communicative skill develops as a function of discriminations and assimilations among social precepts and in a manner completely consistent with the outcomes of a competence analysis. Disregarding independent assessments of role-taking ability, considerable evidence has been amassed documenting growth in the ability of encoders to adapt messages for others as a function of encoders' ages. Studies bearing on this aspect of the

developmental psychology of communication may be grouped into two categories. Investigations in the first group simply describe children's increasing skill at encoding information in a decodable (i.e. nonegocentric) manner. The second category of studies contains those investigations which demonstrate the ontogenetic tendency toward encoding messages differently for receivers with varying attributes.

Paradigmatic of the first class of studies, those which chart developmental trends in encoding information usefully, is the work of Krauss and Glucksberg (1969; Glucksberg & Krauss, 1967). Subjects are required to describe novel forms to listeners who are visually separated and who, in turn, must sequence the forms in the order specified by the encoders. As judged by adult raters, the referential effectiveness of such messages has been found to increase monotonically with age. Kindergartners are quite inept at the task, supplying such non-referring expressions as "It looks like Mommy's hat", while adults perform virtually perfectly on the first trial. Third and fifth graders were able to increase the effectiveness of their encodings across eight trials, while kindergartners could not improve theirs at all and first graders improved only moderately. Moreover, even when explicit feedback requesting additional information is provided to encoders, younger children are unable to recode their messages usefully (Flavell et. al., 1968; Glucksberg & Krauss, 1967; Peterson, Danner & Flavell, 1972). The interpretation of such findings offered by Flavell et. al. (1968) and corroborated by empirical methods (Glucksberg, Krauss & Weisberg, 1966) is that all communicators make self-encodings of perceptions, but younger children are unable to edit or recast these encodings for others.

Since any receiver has characteristics differing from those of the source (i.e. the source possesses information which the receiver does not), this first class of experiments does shed light on the ability to adapt differentially to others. However, more direct evidence is supplied by a second group of studies, expressly designed to explore strategies of message adaptation. Within the referential mode, Flavell et. al. (1968) found that younger children did not vary their descriptions of a board game in recognition of differences between sighted and blind-folded listeners, while older children did display listener dependent adaptation. Similarly, these same investigators as well as Higgins (1973) demonstrated that older children are more likely than younger ones to vary messages on the basis of varying amounts of information possessed by different listeners. Outside of the referential mode, some limited but significant attention has been devoted to children's adaptations of persuasive messages. Wood, Weinstein and Parker (1967) found that older children used a greater variety of persuasive strategies and that these strategies tended to vary with target attributes. Similarly, Finley and Humphreys (1974), investigating appeals directed toward mothers versus those directed toward best friends, concluded that older children have a larger persuasive repertoire and show a tendency to deploy some types of arguments differentially. Piche, Michlin, and Rubin (1976) devised an explicit index of accommodation which was sensitive to the fact that seventh graders used various appeal types more differentially than did fourth graders. In addition, across all targets, older subjects employed more sophisticated personal and norm referenced

strategies as opposed to younger subjects' more frequent use of imperatives. The persuasive function was also the subject of a study by Alvy (1973) who found age, as well as social status and sex, difference in children's adoptions of messages to targets who varied mostly along affective dimensions.

The remarkable aspect of both these sets of studies charting the development of communication skills in children is that they all point to an account of growth in skill which is generalizable across tasks and interactive contexts, which progresses in the absence of formal training, and which follows a hierarchical sequence (Selman & Byrne, 1974). In short, communicative ability develops in the manner first described by Piaget (1926) and ultimately linked to cognitive development, in general (Feffer, 1970; Piaget, 1970).

In this sense, then, cognitive-developmental studies do contribute to the validation of the concept of communicative competence. The developmental psychology of the Piagetian school is, in fact, the study of systematic changes in children's mental representations. The fundamental mechanism of such change, decentration, affects apprehension of the social, as well as the physical world. Children's abilities to communicate in an increasingly effective and socialized manner can be traced to this mechanism. That is, communicative behavior exhibits the same developmental pattern, is amenable to the same sorts of analyses, as other behaviors accounted for within a competence framework. While the failure to empirically verify the connection between role-taking and communicative competence cannot be ignored,

cognitive-developmental psychology provides at least a conceptual basis for thinking of social sensitivity and message adaptation as the twin foundations of communicative competence.

CHAPTER VI

TOWARD A THEORY OF COMMUNICATIVE COMPETENCE

Thus far, this essay has served to identify characteristics of competence theories in general and to demonstrate that such a paradigm is appropriate to the study of human communication. At this point, then, it would be fit to finally present an example of just such a theory of communicative competence. However, no such theory is forthcoming. In accordance with the tenets of competence metatheory, a theory of communicative competence would be a formal (quasi-mathematical) model consisting of a set of abstract terms and a set of logical operations for performing manipulations on strings of these terms. While this paper has demonstrated, through precedent in a number of fields, that this sort of model is a feasible way of explaining communication, it has yielded none of the formal machinery which a theory of communicative competence would require.

One factor which is lacking is an adequate taxonomy of communicative contexts, structures, and functions. Originators of the theory of linguistic competence have paid homage to the prerequisite task of establishing grammatical categories (Chomsky, 1957). While these categories have been altered in light of recent developments, the theory of linguistic competence had at its disposal a taxonomy developed

and refined over the course of three millenia. Chomsky did not have to argue for the adequacy of the pronoun as a unit of linguistic analysis in the same sense that Wallace (1970) proposed the speech act as the fundamental unit of communicative structure or Skinner (1957) had to justify the mand as a category of function. Given the lack of working consensus, any taxonomy of communicative elements is likely to be ad hoc at this time.

The task remaining here, then, is a more general specification of the parameters that would figure into a formal grammar of discourse. Consistent with the conclusions made in reviewing current work in communicative competence, the form of such a grammar of discourse ought to conform to the set of assumptions characterizing cognitivist competence metatheory. The classes of rules that would need be included in this grammar may be inferred from the evidence surveyed from the ethnographic-sociolinguistic, formal-semantic, and cognitive-developmental perspectives.

Since a theory of communicative competence is not a causal or process model, one feature of such a formulation is that no temporal sequence is implied by rule ordering. To the contrary, the model's operations must be governed solely by principles of internal validity: elegance and economy. The components of the model interpenetrate each other, placing constraints on each other's outputs in a fashion that is best viewed as simultaneous. For example, some participant roles place restrictions on appropriate topics. At the same time, certain topics may have the effect of defining participant roles. Similarly, a context (e.g. lecture) may be marked so as to constrain the range of both participant roles and topics.

An additional consequence of the fact that a theory of communicative competence is not a process model is that this model represents neither a speaker nor a listener. The rules, instead, represent knowledge that must be possessed by both. For convenience a communicative competence theory may be metaphorically phrased in terms of production with, say, intention as the primitive term and style markers as the derived output. However, the complementary metaphor is just as apt, with presuppositions about intentions derived from the analysis of style markers.

Finally, any given theory of communicative competence will represent the rules of only a particular speech community, where speech community is viewed as a group of individuals who share common communicative norms and who constitute a stable interpersonal network (Hymes, 1972). Thus, it may be that different speech communities may represent a similar setting, say religious service, differently in terms of participant roles (e.g. Holy Rollers vs. Episcopalians), but all speech communities draw their categories for rule construction from some common and finite pool. Moreover, it must be recognized that a given individual belongs to several speech communities, or may attempt to emulate the norms of various speech communities, and may therefore manifest different communicative norms at different times with varying degrees of success.

Given this set of overarching principles, the rules which constitute a theory of communicative competence are a means of systemically representing how a finite number of categories and operations create an unbounded set of perceptions of interactions which, in turn, govern the stylistic structure of realized utterances.

The content to which these rules pertain include the following:

I. Discourse structure

II. Topic

III. Setting

IV. Communicative intent (function)

V. Person perceptions

a. cognitive state

b. affective state

c. role relations

Discourse structure rules bear some resemblance to Ervin-Tripp's (1972) sequencing rules. They apply at two levels of communication analysis: between distinct utterances by different participants and within a single continuous speech by a given participant. At the most global level, a discourse structure rule may state that no interaction rule is ever appropriate (e.g. when participant roles are marked for highly divergent caste). Or a discourse structure rule might specify the periodicity with which interaction is called for, for example the annual formulaic Christmas card in many middle class American speech communities. Still at the interutterance level of analysis, discourse structure rules represent speakers' expectations concerning how conversations are initiated, maintained, and terminated. Schegloff (1968) and Noefsinger (1975) have begun the task of formalizing knowledge concerning ritualized turn-taking in conversation. A more complex and situation-specific instance of such discourse structure rules would be required to account Turkish boys' verbal duelling which involve phonological dependencies between utterances of distinct

speakers (Dundes et. al., 1972). From a developmental stance, Piaget's (1926) observations of echolalia and simultaneous speech may be interpreted as indicating that youngsters' discourse structure rules do not evolve into adult-like form until middle childhood.

The type of discourse structure rules cited above yield fundamental distinctions between contexts in which message sending is or is not appropriate; about when to speak and when to remain silent. At a less global level of discourse, other rules would apply to within-utterance structure. Some of these discourse structure rules would serve to link subject matter from noncontiguous utterances. For example, a speaker must know if a noun phrase uttered during a previous speaking turn remains sufficiently salient to allow anaphoric reference (Harris, 1952). (If not sufficiently salient, we get linkages like, "That old Chevy I was just talking about, it . . .".) Other discourse structure rules applying directly to the style of the utterance may be genre specific as the rule which specifies, for some children, that taunts must conform to certain patterns of rhyme and prosody in order to count as a taunt.

In addition to factors concerning discourse structure, the topic of discourse also enters into determinations of communicative appropriateness. Linguistic ethnographers have reported evidence of code switching dependent on topic in both bilingual (Greenfield & Fishman, 1971) and bidialectal (Blom & Gumperz, 1972) speech communities. More familiar, if less dramatic, illustrations of topic dependent effects on language variation can be observed in the speech of most professionals. A German philologist, for one, might employ low

frequency lexical items and fairly complex syntax when discussing the development of the umlaut, but lapse into a very opposite pattern when discussing the merits of the hometown football team. Children, also, may vary their verbal persuasive strategies as a function of the object of the messages (Rodnick & Wood, 1973).

Factors pertaining to the spatial and temporal setting of an utterance must also be represented by rules of communicative competence. The facts of appropriate deictic or exophoric pronoun use, for example, can only be accounted for in this fashion. In addition, the adequacy of many acts of reference employing naming noun phrases requires that certain conditions about setting be satisfied. The expression, "the table", is uniquely (adequately) referring only if the immediate setting has only one table present. Similarly, using the nominal "the clown in the White House" to refer to Richard M. Nixon is inappropriate at the time of this writing. Furthermore, certain speech events are restricted to corresponding settings. Grace before meals is appropriately invoked only before meals. Likewise, certain settings seem to place direct constraints on speech styles. In most Western cultures, funerals call for a funereal tone. Greenfield and Fishman (1971) report that Puerto Rican bilinguals' selection of Spanish or English is highly determined by location (e.g. Spanish in the home, English in school).

A theory of communicative competence must also include rules which permit for the encoding and retrieval of speakers' communicative intentions. That is, the function of an utterance must appear at some level of representation. An utterance like, "Could you lift that stone?" might derive from two different intention markers (e.g. question and

request) and thus remain functionally ambiguous unless the representation of the utterance contained additional markers concerning context or participant roles. Jacobson's (1960) taxonomy of expressive, referential, conative, phatic, metalinguistic, and poetic functions is one crude, but fairly well accepted, scheme that might be incorporated into formalizations of intention rules.[6] Searle's (1976) categories of illocutionary acts may be viewed as illustrations of finer grained, if less comprehensive, analyses of communicative intentions. Thus, if rules of communicative competence permit the identification of an utterance as, say, a promise, then additional rules similar to those previously described in conjunction with speech act theory would deduce the speaker's intentions (assuming conditions of felicity).

We have stressed several times in this paper that a theory of communicative competence is an account of mechanisms underlying message adaptation. At least implicitly, therefore, we have been adopting a rhetorical perspective on communication, for ultimately messages are adapted to affect people. In order to achieve rhetorical effect, a speaker must have knowledge of his or her listener. Thus, of all the elements figuring into competence formulations, the most central are person perceptual factors. In a theory of communicative competence, person perceptual rules are those by which knowledge of salient audience characteristics are represented.

Certainly one crucial audience characteristic that a speaker must take into account is what the listener knows. As discussed in the previous chapter, the cognitive developmental perspective has taken the charting of growth in this area as its predominant concern. Cognitive

state rules are conspicuous by their absence in the egocentric messages of early childhood. For mature adult communication, Searle's (1968) analysis of the act of referring stipulates that a referring expression is one that is not only essential to the object referred to, but also important to the listener. One of Grice's (1967) conversational conventions may be plainly paraphrased as "Don't tell what your listener already knows." Thus, the utterance of one drenched passerby to another, "It sure is raining," would be judged deviant if not for our tendency to search for well-formed representation. (In this case we interpret the utterance as phatic rather than referential in function.) Yet more complex rhetorical sensitivity must be incorporated into cognitive state rules to account for the kinds of audience analyses speakers undergo in determining, for instance, how much background information to present to the Minnetonka Garden Club when addressing them on the subject of German philology.

Just as a theory of communicative competence must include provisions for adapting to the listener's cognitive state, so must it contain rules concerning the other's affective condition. That is, in order to explain many instances of appropriate message adaptation, it must be postulated that speakers can represent what listeners feel. Alvy (1973) found an ontogenetic trend in children's abilities to adapt their communication to listener's displaying various emotional cues. Much in the same vein, social-psychological research on attitude change has documented the relationship between message effectiveness and playing toward audience predispositions (Brown, 1965). Indeed, much of

what is typically deemed a sense of tact or sensitivity to others' feeling is simply common sense about affective state rules.

While cognitive and affective states may be thought of as fairly dynamic, the role relations between any given set of speaker and listener tend to be stable.[7] For example, one analysis of Russian pronominal usage lists among critical person perceptual discriminations categories of age, generation, sex, geneological distance, relative authority, and social distance in terms of group membership (Friderich, 1972). The role features of relative power, intimacy and solidarity emerge consistently from ethno- and sociolinguistic research on stylistic variation (Blom & Gumperz, 1972; Brown & Ford, 1964; Brown & Gilman, 1960; Geetz, 1960; Rubin, 1962). Thus, a role relation rule in a theory of communicative competence would construct structural descriptions from constellations of such features and relate these descriptions to the output of some manifest linguistic markers of formality and deference. Recently the President of the United States chose to be sworn into office as "Jimmy Carter" rather than "James." While many might have believed this linguistic informality to be inappropriate, all could infer the presuppositions concerning power and solidarity that the President intended to communicate to his constituents. It is this sort of knowledge that is embodied by role relations rules. Similarly, much of the research on linguistic signalling of group affiliation through dialect markers (Labov, 1973), slang terms (Flexner, 1967) or even language choice (Lambert, 1967), may be interpreted as evidence for the internalization of role relationship rules.

This outline of the elements which must be included in a theory of communicative competence has served to define a set of problems more than to solve any. The one issue which must be addressed before this paper has run its course is: Are the benefits accruable from a theory of communicative competence commensurate with the effort necessary to work out the formal problems involved? A theory of communicative competence is merely a formalization of speakers' intuitions about linguistic appropriateness. It is, therefore, unlikely to yield any startling new discoveries of practical value to members of a speech community. Moreover, a theory of communicative competence makes no direct claim to psychological reality. Thus, its impact is yet further removed from direct usefulness, in terms of interpersonal techniques.

Although theories of communicative competence do not promise immediate rewards in terms of improving communicative performances, their development does portend advances in systematic research in communication behavior patterns. Robinson (1972) provides a backhanded rationale for the development of theories of communicative competence, arguing that ". . . to expose the rules is but a prelude to the main business of relating language and social behavior, a beginning not an end" (p. 199). That is, in much the same way that generative grammar has served psycholinguistics, so may theories of communicative competence aid the advancement of empirical research in communication. The competence theory's role in this sense is to specify variables and produce testable hypotheses that might be applied to research on process. Many of these hypotheses will no doubt be disconfirmed (note that this occurrence does not reflect on the theory's validity), but a starting

point which is theoretically well-founded is nevertheless a precious commodity for the empirical researcher.

Furthermore, the kind of empirical research that would be engendered by theories of communicative competence would emphasize the study of generalized patterns of behavior. It would encourage the search for invariance in the midst of individual differences, rather than being stymied at the point of recognizing the vastness of idiosyncratic variation, as has sometimes been the case in communication studies. In this sense, empirical research derived from theories of communicative competence would signal a rejuvenation of the aims of traditional rhetorical theory: to isolate commonality, if not universality, in the manner in which symbolic expression may be crafted in a manner appropriate to the effects intended by speakers.

A second area in which theories of communicative competence might prove useful is that of intercultural sensitivity. Members of one speech community might often be offended by, or misunderstanding of, the communicative manners of another community's speakers. However, just as structural and transformational linguistic analyses on nonstandard dialects served to debunk a deficit view of nonstandard systems, so might grammars of communication increase tolerance of differing communicative styles. If it can be demonstrated that all speech communities operate by means of systematic principles, and that these principles are largely similar across communities, then cross-cultural relations might be less marked by negative stereotypes based on misapprehensions concerning expressive styles.

Yet another possible benefit which might arise from development of theories of communicative competence is in the realm of communication

education practices. While competence formulations make no direct claims about processes of skill acquisition and development, they are metatheoretically linked to the view that such skills are not explicitly taught or learned by rote. Rather, knowledge represented by a competence theory is acquired by a combination of maturational processes and inference from experience (Lennenberg, 1967). Curricular practices may be informed by this perspective and the theory itself may serve to specify the range of experiences to which students might be most profitably exposed (Cazden, 1970; Hopper, 1971; Piche & Michlin, 1974). In addition, theories of communicative competence written for children at various stages of development would provide a rational basis for sequencing these exposures.

It may very well be that the reader will judge none of these reasons, or even their concert, to be sufficient justification for construction of theories of communicative competence. In the course of this paper, we have made no claims of comparative superiority; we have not asserted that a theory of communicative competence provides a <u>better</u> mode of explanation than any other. In the final analysis, then, the ultimate rationale for the construction of theories of communicative competence is the same as the perennial justification for climbing the mountain. Like the mountain, theories of communicative competence are there, just at horizon's edge. And like the mountain, they represent a challenge to our ingenuity and perseverance.

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Footnotes

[1]The terms "paradigm", "metatheory", "framework", and "perspective" will be used rather interchangeably to denote sets of assumptions concerning methods, goals, modes of explanation, and central constructs which constitute the "givens" under which theories in various disciplines are constructed. In using these terms, no presumption is made of wide-spread acceptance or of comprehensive specification of these assumptions. In contrast, the term "theory" is reserved for particular accounts of specific phenomena. A "competence theory" is a particular account that conforms to the metatheoretical assumptions of the competence paradigm.

[2]It is necessary to delineate that class of behaviors which qualify as communicative. Most loosely, a communicative act is one which has, at the least, a potential for transmitting meaning from a source to a receiver. However, this set is too inclusive for the purposes of competence analysis. Some meaning-transmitting behaviors may operate at a purely physiological level (e.g. blushing, sweating, responding to odors) and there is no reason to suspect that they need be represented cognitively. H. P. Grice (1958) has suggested the category of non-natural meaning wherein signs have non-natural meaning if the equivalence between sign and significance is essentially arbitrary and conventional. In addition to non-natural meaning, it is necessary to add the constraint of intentionality (Searle, 1969). That is, an act will count as an instance of communication for the purposes of competence analysis (let us call such an act "communication

comp") if it was performed with the intention that the act non-naturally convey some meaning to a receiver. Indeed, it appears that intentionality is a feature of any rule system since rules (as opposed to laws) guide action (as opposed to motion) and action entails some form of volition (Braybooke, 1968; Burke, 1966; Harré, 1974). However, in order to avoid the problem of consciousness in rule-governed behaviors, we must be willing to accept as intentional communication any act with an essentially expressive teleological commitment. Note, also, that the criteria of non-natural meaning and intentionality do not necessarily exclude many nonverbal expressions from rule analyses (cf. Birdwhistle, 1970).

[3]The meaning-as-use doctrine (in its varied forms) is a result of dismissing any conception of meaning as an entity. Arguments of this type (Black, 1968, Waissman, 1965) begin by asserting that if meaning were an entity, it must either be a physical object, an idea (mental entity), or a disposition to respond (behavioral entity). Referential theories of meaning (Russell, 1919) hold that meaning is an entity of the first type; the meaming of a word is the object to which it refers. If this account were correct, then "unicorn" would either be meaningless, or else synonymous with "centaur". Clearly, neither alternative is acceptable. Also, under the referential view, phrases which refer to the same physical object like "Richard Nixon" and "that dog in the White House" would mean the same. In order to avoid such dilemmas, the ideational theory of meaning posits that the meaning of a word is the idea of the referrent. Idea, being a vague concept, is most often equated with mental image (Black, 1968). However, many unambiguous terms have no single image, even for a given individual. Wittgenstein

(1953), an early ordinary language philosopher, aptly observes that the formation of a mental image in association with a word is entirely incidental to the apprehension of meaning. Another ideational theory of meaning is the verificationist theory (Hempel, 1971). In this formulation, the meaning of an expression is the idea of the set of operations which a person might perform in order to observe the expression's referent. However, the expression "a stone which turns lead to gold" provides a counter example to the verificationist criterion since it may be used meaningfully even by those who have no knowledge of how such a stone might be observed. A final contender for the locus of meaning is the disposition to respond as if to the referent of an expression (Ogden and Richards, 1938; Osgood, 1952). This behaviorist hypothesis asserts that a covert component of a total behavioral response becomes associated with a stimulus. If the stimulus is the referent of some symbol, then the covert mediational response to that stimulus becomes associated with the symbol as the symbol's meaning. But the nature of a disposition to respond remains as vague as the characteristics of an idea. Indeed, any stimulus-response model of language is, in principal, lacking in explanatory power (Chomsky, 1959, Fodor, 1965).

If meaning is not a physical, mental, or behavioral entity, it may still correspond to the use to which an expression is put. Just as the best way to demonstrate the nature of a tool is to use it in a variety of ways, so is the best way to specify the meanings of a term to use that term in a variety of contexts.

[4]Illocutionary acts are differentiated not only from locutions, but also from perlocutionary acts or perlocutions (Austin, 1962). This distinction is particularly important for the study of rhetoric, which is concerned with effects of communicative acts, as well as their form. Illocutions entail consequences which are entirely due to the arbitrary conventions which are constituative of those illocutions (see discussion of felicity conditions, below). For example, the conventions for uttering (18) have the consequence of marrying two people when (18) is uttered conventionally. However, the utterance of (18) may or may not have further consequences. It might, for example, have the effect of establishing a relationship of fidelity between the two people married. Or, the utterance of (18) might have the effect of causing the bride's mother to weep. If these additional, non-necessary effects do result from the utterance of (18), then the speech act has functioned not only as an illocution, but also as a perlocution. Note that the effects brought about by the perlocution might also have been brought about by non-linguistic means; by jealousy and by a tight corset, respectively. Unlike illocutionary consequences, perlocutionary consequences are not legislated by convention, are not rule governed.

The lack of conventionality of perlocutions has as a ramification that rhetoric must remain a probabilistic science. Compare the following:

(28) I implore you to stop beating me

(29) *I persuade you to stop beating me

To implore is to perform an illocutionary act which may or may not function also as a perlocutionary act. To persuade is a perlocutionary

act, but not illocutionary. Persuasion does not follow necessarily as a consequence of any speech act, while imploring does necessarily follow from the utterance of (28) in accord with the conventions for making such an utterance. The perlocutionary effects of uttering (28), if any, need have no relation to persuasion. The utterance might cause a particularly sadistic auditor to be amused. It is the task of the rhetorician to determine the probability with which the members of the set of possible non-conventional effects might result as a consequence of the utterance of a given situated speech act. A theory of communicative competence may aid the rhetorician in determining the intentions and perceptions of a message source, but such a theory cannot provide a full inventory of effects.

[5]In the typology of Warr and Knapper (1968) the content of the percepts resulting from the role-taking process is a hypothetical representation of the percepts of the object person. That is, through role-taking we ascertain how another is perceiving the world or the current interaction (as opposed to ascertaining some attribute, say, trustworthiness or height in inches). In addition, the content of the percepts is essentially episodic, in the "here and now", rather than dispositional. (Though dispositional generalizations about others' stable traits are likely automatic by-products of role-taking.) The episodic nature of person perceptions generated through role-taking is significant since the goal of instrumental role-taking is the adaptation of on-going message construction rather than social judgment as an end in itself (Rommetveit, 1960). The perceptually salient cues cognized in role-taking include immediate sensory data as well as stored

information about the determinate other and expectancies about the stereotypical other (Milgram & Goodglass, 1961; Tagiuri, 1969). Direct reports about the other's perceptions are important to person perception generally, but do not figure into role-taking specifically. Thus, the process by which cues are cognized and transformed into role-taking perceptions is deductive-inferential (Flavell, 1966) and may include such psychological components as analogy to self, avoidance of dissonance or inconsistency, etc. (Hamlyn, 1974; Tagiuri, 1969).

The role-taking process is not unidimensional but, itself, entails several subskills (Flavell, 1966, 1974; Flavell, et. al., 1968). The existence subskill is fundamental and earliest in onset (Selman & Byrne, 1974). This subskill requires the knowledge that others exist apart from the self and that others' perspectives need not be identical to one's own. The need subskill involves knowledge that in a given situation communicative effectiveness necessitates the apprehension of a nonautistic perspective. Young children recognize that other perspectives exist, yet may not spontaneously appreciate the imperative for identifying them (Glucksberg, Krauss & Higgins, 1975). The inference component of role-taking pertains to the actual operation of ascertaining the other's perspective. In turn, it consists of two types of functions. One must create the hypotheses, perform the inference, but one must also maintain the integrity of the second-person perspective from the incessant onslaught of egocentric intrusion (Piaget, 1926). Beyond these subskills which comprise role-taking per se, is the application subskill: that host of rhetorical abilities whereby messages are adapted in accordance with the output of the role-taking process and which are frequently confounded in the measurement of role-taking ability proper (Flavel, et. al., 1968).

It must be noted that in cognitive developmental literature, discussions of role-taking frequently fail to preserve many of the distinctions made above. Flavell (1974), for example, equates role-taking with the process of "somehow obtaining impressions about the relatively more inner-psychological acts and attributes of human objects" (p. 66). However, if we are to preserve the distinction of such related constructs as empathy, whose content is largely generalized affective states and whose process may involve partial mimicry (Tagiuri, 1969), a rigorous definition of role-taking is imperative. Moreover, as Chandler and Greenspan (1972) argue in criticizing more lenient conceptions of role-taking or nonegocentric thought, "Nonegocentric thought . . . is not simply a synonym for accurate social judgement but implies the ability to anticipate what someone else might think or feel precisely when those thoughts and feelings are different from one's own. Without important qualification egocentric and nonegocentric thought result in the same outcome and their measurement is hopelessly confounded" (p. 105). It may very well be that the failure to specify role-taking precisely, in terms of its definitional properties and component subskills, is responsible for the general failure of empirical studies, discussed in the following paragraphs, to establish a substantial correlation between this person perceptual process and communicative effectiveness.

[6]Rules concerning phatic intentions would include ways to represent relationship signalling. For example, if a Guarani speaker wishes to signal interpersonal remoteness, he or she may speak in Spanish (Rubin, 1962). Thus, many utterances may have derivations

which include intentions of defining or altering stable features of relationships such as power, solidarity, intimacy, and interpersonal attraction. As such, rules pertaining to phatic intentions will overlap considerably with role relation rules to be described below.

[7]The one exception to this generalization may be the fundamental conversational roles of interrogator/responder, speaker/listener, which shift rapidly during the course of an interaction. However, these roles are more aptly represented by discourse structure rules as previously discussed. Most role relationships which have received attention have tended to be either institutionally defined or of otherwise established norms; in either case prolonged.